SEQUENCE LISTING

<110> Nihon University

<120> The CD20 gene of dog

<130> NICHI4

<140> 2004-0033810
<141> 2004-02-10

<160> 20

<170> PatentIn Ver. 2.1

<210> 1
<211> 297
<212> PRT
<213> Dog

<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 1

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Met Thr Thr Pro Arg Asn Ser Met Ser Gly Thr Leu Pro Val Asp Pro
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Met Lys Ser Pro Thr Ala Met Tyr Pro Val Gln Lys Ile Ile Pro Lys
            20                  25                  30

Arg Met Pro Ser Val Val Gly Pro Thr Gln Asn Phe Phe Met Arg Glu
        35                  40                  45

Ser Lys Thr Leu Gly Ala Val Gln Ile Met Asn Gly Leu Phe His Ile
    50                  55                  60

Ala Leu Gly Ser Leu Leu Met Ile His Thr Asp Val Cys Ala Pro Ile
65                  70                  75                  80

Cys Ile Thr Met Trp Tyr Pro Leu Trp Gly Gly Ile Met Phe Ile Ile
                85                  90                  95

Ser Gly Ser Leu Leu Ala Ala Ala Asp Lys Asn Pro Arg Lys Ser Leu
            100                 105                 110

Val Lys Gly Lys Met Ile Met Asn Ser Leu Ser Leu Phe Ala Ala Ile
        115                 120                 125

Ser Gly Ile Ile Phe Leu Ile Met Asp Ile Phe Asn Ile Thr Ile Ser
    130                 135                 140

His Phe Phe Lys Met Glu Asn Leu Asn Leu Ile Lys Ala Pro Met Pro
145                 150                 155                 160

Tyr Val Asp Ile His Asn Cys Asp Pro Ala Asn Pro Ser Glu Lys Asn
                165                 170                 175

Ser Leu Ser Ile Gln Tyr Cys Gly Ser Ile Arg Ser Val Phe Leu Gly
            180                 185                 190

Val Phe Ala Val Met Leu Ile Phe Ala Phe Phe Gln Lys Leu Val Thr
        195                 200                 205

Ala Gly Ile Val Glu Asn Glu Trp Lys Lys Leu Cys Ser Lys Pro Lys
    210                 215                 220

Ser Asp Val Val Val Leu Leu Ala Ala Glu Glu Lys Lys Glu Gln Pro
225                 230                 235                 240

Ile Glu Thr Thr Glu Glu Met Val Glu Leu Thr Glu Ile Ile Ala Ser
                245                 250                 255

Gln Pro Lys Lys Glu Glu Asp Ile Glu Ile Pro Val Gln Glu Glu Glu
            260                 265                 270
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Gly Glu Leu Glu Ile Asn Phe Ala Glu Pro Pro Gln Glu Gln Glu Ser
275 280 285

Ser Pro Ile Glu Asn Asp Ser Ile Pro
290 295

<210> 2
<211> 44
<212> PRT
<213> Dog

<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 2
Thr Ile Ser His Phe Phe Lys Met Glu Asn Leu Asn Leu Ile Lys Ala
1 5 10 15

Pro Met Pro Tyr Val Asp Ile His Asn Cys Asp Pro Ala Asn Pro Ser
20 25 30

Glu Lys Asn Ser Leu Ser Ile Gln Tyr Cys Gly Ser
35 40

<210> 3
<211> 1238
<212> DNA
<213> Dog

<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 3
atcagccact cgccctaagg ccacagacac tcaggagttc agagggtgag atgacaacac 60
ccagaaattc aatgagtgga accctcccgg tagatcctat gaaaagccct actgccatgt 120
atcctgttca aaaaataatt cccaaaagga tgccttcagt ggtgggccct acacaaaact 180
tcttcatgag ggaatctaag acactggggg ctgtccagat tatgaatggg ctcttccaca 240
ttgccctagg cagcctcctg atgattcaca cggatgtctg tgcgcccatc tgtataacta 300
tgtggtaccc tctctgggga ggcattatgt tcatcatttc tggatcactc ctggcagcag 360
cggacaaaaa ccccaggaag agtttggtca aaggaaaaat gataatgaac tcattgagcc 420
tctttgctgc catttctgga ataatttttt tgatcatgga catatttaat attaccattt 480
cccatttttt taaaatggag aatttgaatc ttattaaagc tcccatgcca tatgttgaca 540
tacacaactg tgacccagct aacccctctg agaaaaactc tttatctata caatattgtg 600
gcagcatacg atctgttttc ttgggcgttt ttgctgtgat gctgatcttt gccttcttcc 660
agaaacttgt gacagctggc attgttgaga atgaatggaa aaaactgtgc tctaaaccta 720
aatctgatgt agttgttctg ttagctgctg aagaaaaaaa agaacagccg attgaaacaa 780
cagaagaaat ggttgagctg actgaaatag cttcccaacc aaagaaagaa gaagacattg 840
aaattattcc agtccaagaa gaagaagggg aactggaaat aaactttgca gaacctcccc 900
aggagcagga atcttcacca atagaaaacg acagcatccc ttaagtaacg tttttctttc 960
tgtttccttt tcttaggcgt tagtgttcac agctttcaag agacatatcc acccctgttt 1020
cctgaggccc cctgcaggtg ggcctcctcc atgtgtctct ctggcctttg catggagtga 1080
ccacagctcg cttgcgctag ctcgctctct ttctctcatg cagaggatgc agccattgca 1140
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acttttccct ggataaagct taaaaaaaaa aaaaaaaa 1238

<210> 4
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<212> RNA
<213> Dog

<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 4
aucagccacu cgcccuaagg ccacagacac ucaggaguuc agagggugag augacaacac 60
ccagaaauuc aaugagugga acccucccgg uagauccuau gaaaagcccu acugccaugu 120
auccuguuca aaaaauaauu cccaaaagga ugccuucagu ggugggcccu acacaaaacu 180
ucuucaugag ggaaucuaag acacuggggg cuguccagau uaugaauggg cucuuccaca 240
uugcccuagg cagccuccug augauucaca cggaugucug ugcgcccauc uguauaacua 300
ugugguaccc ucucugggga ggcauuaugu ucaucauuuc uggaucacuc cuggcagcag 360

cggacaaaaa ccccaggaag aguuugguca aaggaaaaau gauaaugaac ucauugagcc 420
ucuuugcugc cauuucugga auaauuuuuu ugaucaugga cauauuuaau auuaccauuu 480
cccauuuuuu uaaaauggag aauuugaauc uuauuaaagc ucccaugcca uauguugaca 540
uacacaacug ugacccagcu aaccccucug agaaaaacuc uuuaucuaua caauauugug 600
gcagcauacg aucuguuuuc uugggcguuu uugcugugau gcugaucuuu gccuucuucc 660
agaaacuugu gacagcuggc auuguugaga augaauggaa aaaacugugc ucuaaaccua 720
aaucugaugu aguuguucug uuagcugcug aagaaaaaaa agaacagccg auugaaacaa 780
cagaagaaau gguugagcug acugaaauag cuucccaacc aaagaaagaa gaagacauug 840
aaauuauucc aguccaagaa gaagaagggg aacuggaaau aaacuuugca gaaccucccc 900
aggagcagga aucuucacca auagaaaacg acagcauccc uuaaguaacg uuuuucuuuc 960
uguuuccuuu ucuuaggcgu uaguguucac agcuuucaag agacauaucc accccuguuu 1020
ccugaggccc ccugcaggug ggccuccucc augugucucu cuggccuuug cauggaguga 1080
ccacagcucg cuugcgcuag cucgcucucu uucucucaug cagaggaugc agccauugca 1140
ggaggcuaag ucgggcagcu uauuuacauu acagcaaggc agacuguaau uucucacuaa 1200
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<210> 5
<211> 132
<212> DNA
<213> Dog

<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 5
accatttccc atttttttaa aatggagaat ttgaatctta ttaaagctcc catgccatat 60
gttgacatac acaactgtga cccagctaac ccctctgaga aaaactcttt atctatacaa 120
tattgtggca gc 132

<210> 6
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:synthetic
sequence

<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 6
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<210> 7
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:synthetic
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<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 7
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<210> 8
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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sequence

<220>
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<400> 8
tggaagaagg caaagatcag cat 23

<210> 9
<211> 18
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<400> 9
tgtaaaacga cggccagt 18

<210> 10
<211> 17
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<400> 10
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<210> 11
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<212> DNA
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<210> 12
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<212> DNA
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<210> 13
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<212> DNA
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<220>
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<220>
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<400> 13
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<210> 14
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<212> DNA
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<220>
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<220>
<223> Inventor: Kano, Rui; Inoue, Chika.

<400> 14
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<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<400> 15
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<210> 16
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<220>
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<220>
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<400> 16
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<210> 17
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<212> DNA
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<220>
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<400> 17
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<210> 18
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<400> 18
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<210> 19
<211> 23
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<210> 20
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